

## CLAIMS

I claim,

1. A torque measuring device for hydraulic installer for earth anchor, including a torque measuring housing, means provided upon the housing for connecting the high and low hydraulic pressure lines to the installer, first and second transducers, each cooperating with a solid-state, strain-gage sensor, for determining the hydraulic fluid pressure generated in the supply pressure and return lines, respectively, during operation of the device, and for converting the determined pressure to an electrical signal, and an electronic read-out device electrically connected with the torque measuring device, to provide for a calculation and read out for display of the measured torque, whereby the torque generated by the hydraulic installer can be sensed and calibrated to furnish an accurate torque read-out in foot pounds of the amount of torque being applied by the installer when driving an earth anchor into the ground.

2. The torque measuring device for hydraulic installer for earth anchor of claim 1 including a toggle switch operatively associated with the device, within its circuitry, to provide for a read-out of the calculated high and low pressure measurements.

3. The torque measuring device of claim 1 wherein said first transducer senses and measures the high pressure generated in the hydraulic source, said low pressure transducer providing for a read-out for the low fluid pressure generated in the hydraulic pressure lines, means for converting said high and low pressure determinations to electrical signals, means for providing a determination of the signal difference between the high and low pressures detected, and a panel meter provided upon the torque measuring device furnishing an analog read-out in foot pounds of the amount of torque being applied by the installer when driving an earth anchor into the ground.

4. The torque measuring device of claim 3 wherein said signal differencing means includes a potentiometer, provided for calibrating the device to zero when the measurements of the detected pressures are equal.

5. The torque measuring device of claim 4 and including battery means operatively associated with the electrical circuitry to provide the levels of voltage

necessary for operations of the sensors, transducers, and potentiometer during processing of generated signals to provide a read-out in foot pounds of the amount of generated torque.